

2000-366819/32	A14 F09 (A97)	BDI 1998.11.05 *DE 19851024-A1 1998.11.05 1998-1051024(+1998DE-1051024) (2000.05.11) C08F 26/00, D21H 17/34, 21/10, 21/18	A(2-A3, 4-D, 7-B3, 10-B5, 12-W6B, 12-W12C) F(5-A6C)
→	Aqueous dispersion for papermaking comprises water-soluble N-vinyl formamide and/or N-vinyl acetamide polymers and an incompatible polymer dispersant	above dispersions by radically polymerizing the components at 30-95°C in water.	
→	C2000-110922 Addnl. Data: NEGELE A, GAUWEILER W, MEIXNER H, MAHR N, RUEBENACKER M	<u>USE</u> As a dehydration, flocking or retention agent, wet and dry breaking limit material and fixer in paper production (all claimed)..	
		<u>ADVANTAGE</u> The properties of the obtained paper are improved.	
		<u>SPECIFIC MATERIALS</u> (a) is an N-vinyl formamide homopolymer and the units are converted to give a (partially) vinyl amine unit-containing polymer by acid or base hydrolysis.	
		<u>EXAMPLE</u> 212 g of a dispersion prepared from 1200 g water, 5 g Na dihydrogen phosphate dihydrate, 150 g polyvinyl pyrrolidone, 150 g polyethylene glycol, 500 g N-vinyl formamide and 2.5 g 2,2'-azobis-[DE 19851024-A+]	
		<u>DETAILED DESCRIPTION</u> An INDEPENDENT CLAIM is included for the production of the	

(2-aminopropane)dihydrochloride in 100 g water (solids content 41%, viscosity 3075 mPa.s, K value 138, residual N-vinyl formamide 0.2%) was mixed with 2.8 g HCl and reacted to give a polymer with 8.5% vinyl amine units (viscosity 4800 mPa.s, average particle size 200 nm, mol. wt. 500,000). When used at 0.08% in papermaking, the water removal time was 23 s, cf. 28 s with a polyamideamine according to US 4144123.

TECHNOLOGY FOCUS

Polymers - Preferred Components: (b) is polyethylene glycol, polypropylene glycol, ethylene glycol/propylene glycol copolymer, PVA, PVOH, polyvinyl pyridine, polyvinyl imidazole, polyvinyl succinimide, polydiallyl dimethyl ammonium chloride and/or polyethylene imine (claimed).

Preferred Process: The preparation is at 40-70°C and is in the presence of 0.001-5.0 (0.5-2.0) wt.% azo compounds (claimed).

Preferred Composition: The dispersion contains 10-50 pts. wt. (a) and 5-40 pts. wt. (b) (claimed).
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